IN THE CLAIMS

Please amend claims 22, 31, 36, 40, and 43 as follows:

1-21. (Cancelled)

22. (Currently Amended) A circuit arrangement comprising:

a resonator circuit for generating an output signal from an input signal with a capacitance and with an inductance, with an input at which the input signal can be provided, and with an output at which the output signal can be provided; and

a control circuit for open-loop or closed-loop control of a quality factor of the resonator circuit, the control circuit being configured to control the quality factor of the resonator circuit ~~in an open-loop manner or in a closed-loop manner~~ depending on a signal profile of the signal amplitude of the input signal and/or of the output signal.

23. (Previously Presented) The circuit arrangement of claim 22, comprising wherein the resonator circuit has a nonreactive resistance configured to be controlled by the control circuit.

24. (Previously Presented) The circuit arrangement of claim 23, comprising wherein:

the input signal can be provided between a first terminal of the nonreactive resistance and a first terminal of the capacitance;

the output signal can be provided between the first terminal of the capacitance and a second terminal of the capacitance;

a second terminal of the nonreactive resistance is coupled to a first terminal of the inductance and a second terminal of the inductance is coupled to the second terminal of the capacitance.

25. (Previously Presented) The circuit arrangement of claims 22, comprising wherein the control circuit is configured to control the quality factor of the resonator circuit based on a

Boltzmann function and/or the derivative thereof, the Boltzmann function containing the amplitude of the output signal as a parameter.

26. (Previously Presented) The circuit arrangement of claim 22, comprising wherein the control circuit is configured to set the quality factor of the resonator circuit in a manner dependent on the amplitude of the output signal based on a sensitivity characteristic determined for an ear of a human being.

27. (Previously Presented) The circuit arrangement of claim 22, comprising wherein the control circuit is configured to set the quality factor of the resonator circuit to be lower, the higher the amplitude of the output signal.

28. (Previously Presented) The circuit arrangement of claim 27, comprising wherein the control circuit is configured to set the quality factor of the resonator circuit in a nonlinear dependence on the amplitude of the output signal.

29. (Previously Presented) The circuit arrangement of claim 22, comprising wherein the control circuit is configured to set the quality factor of the resonator circuit in such a way that the amplitude of the output signal is within a predetermined interval.

30. (Previously Presented) The circuit arrangement as claimed in one of claims 22, configured to process an acoustic signal as input signal.

31. (Currently Amended) A circuit arrangement comprising:

a plurality of resonator circuits, each resonator circuit for generating an output signal from an input signal with a capacitance and with an inductance, with an input at which the input signal can be provided, and with an output at which the output signal can be provided; and

a control circuit for open-loop or closed-loop control of a quality factor of the resonator

circuit, the control circuit being configured to control the quality factor of the resonator circuit ~~in an open-loop manner or in a closed-loop manner~~ depending on a signal profile of the signal amplitude of the input signal and/or of the output signal,

wherein an output signal of a resonator circuit that is respectively connected upstream to be provided as an input signal to the resonator circuit that is respectively connected downstream thereof.

32. (Previously Presented) The circuit arrangement of claim 31, comprising wherein the second terminal of the coil of a resonator circuit connected upstream is coupled to the first terminal of the nonreactive resistance of the resonator circuit connected downstream of the resonator circuit connected upstream.

33. (Previously Presented) The circuit arrangement of claim 31, comprising an operational amplifier between a resonator circuit connected upstream and the resonator circuit connected downstream thereof,

a first input of the operational amplifier being coupled to the second terminal of the coil of the resonator circuit connected upstream; and

a second input of the operational amplifier being feedback-coupled to the output thereof and being coupled to the first terminal of the nonreactive resistance of the resonator circuit connected downstream of the resonator circuit connected upstream.

34. (Previously Presented) The circuit arrangement of claim 31, comprising wherein the quality factor of all the series-connected resonator circuits is set in identical fashion.

35. (Previously Presented) The circuit arrangement of claim 31, comprising wherein the quality factor of each of the series-connected resonator circuits is set in individual fashion.

36. (Currently Amended) A circuit arrangement comprising:

a plurality of resonator circuits, each resonator circuit for generating an output signal from an input signal with a capacitance and with an inductance, with an input at which the input signal can be provided, and with an output at which the output signal can be provided;

a control circuit for open-loop or closed-loop control of a quality factor of the resonator circuit, the control circuit being configured to control the quality factor of the resonator circuit ~~in an open-loop manner or in a closed-loop manner~~ depending on a signal profile of the signal amplitude of the input signal and/or of the output signal; and

a plurality of parallel-connected branches, each of which has a resonator circuit or a plurality of series-connected resonator circuits, it being possible for the quality factor of a respective resonator circuit to be controlled by means of the control circuit.

37. (Previously Presented) The circuit arrangement of claim 36, comprising wherein the at least one resonator circuit of a respective branch is set up in such a way that it is transmissive for a respective frequency range of the input signal in such a way that the branches are jointly transmissive for a contiguous frequency interval.

38. (Previously Presented) The circuit arrangement of claim 37, comprising wherein the frequency ranges for which different branches are transmissive overlap one another at least partially.

39. (Previously Presented) The circuit arrangement of claim 37, comprising wherein the frequency range for which a respective branch is transmissive can be predefined by means of setting the value of the capacitance and/or the inductance of the at least one resonator circuit of the branch.

40. (Currently Amended) A signal processing device comprising:

A circuit arrangement comprising:

a resonator circuit for generating an output signal from an input signal with a

capacitance and with an inductance, with an input at which the input signal can be provided, and with an output at which the output signal can be provided; and

a control circuit for open-loop or closed-loop control of a quality factor of the resonator circuit, the control circuit being configured to control the quality factor of the resonator circuit ~~in an open-loop manner or in a closed-loop manner~~ depending on a signal profile of the signal amplitude of the input signal and/or of the output signal; and

a processing unit for further processing of the output signal.

41. (Previously Presented) The signal processing of claim 40, comprising wherein the further processing unit is a speech recognition device; or a hearing aid.

42. (Previously Presented) The signal processing device of claim 40, configured as an analog or digital filter bank.

43. (Currently Amended) A circuit arrangement comprising:

means for providing a resonator circuit for generating an output signal from an input signal with a capacitance and with an inductance, with an input at which the input signal can be provided, and with an output at which the output signal can be provided; and

means for providing a control circuit for open-loop or closed-loop control of a quality factor of the resonator circuit, the control circuit being configured to control the quality factor of the resonator circuit ~~in an open-loop manner or in a closed-loop manner~~ depending on a signal profile of the signal amplitude of the input signal and/or of the output signal.